Virtual Crosswalk Analysis Tool (VCAT)

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Applications:

- Answers a wide range of fundamental questions related to program and business development
- Finds synergies in product or capability development within an organization
- Determines how entities relate to the needs of customers or to challenges from competing organizations
- Establishes the real enterprise workflows within organizations, within business sectors and across sectors
- Identifies products/activities that are critical resources for other products/activities
- Indicates common concepts, language and activities that bind organizations together

Summary:

VCAT is a knowledge modeling and analysis tool synthesized from ideas in functional analysis, business process modeling, and complex network science. VCAT discovers synergies by analyzing natural language descriptions. Specifically, it creates visual analytic perspectives that capture intended organizational structures and then overlays the serendipitous relationships that point to potential synergies within an organization or across multiple organizations.

All organizations struggle to understand the relationships among projects in their portfolios and synergies that may link their interests with those of customers or other organizations. For example, enterprise workflows, organization charts and other standard business representations show only the intended relationships and miss the rest. Social networking and data mining tools may show intended relationships and ignore the business plan. VCAT was developed by Los Alamos National Laboratory (LANL) as broad innovation capability for large organizations that endeavor to understand their resource utilization and potential for collaboration.

The VCAT activity-centric data model is flexible enough to encompass enterprise relationships across any set of organizational units. Linkage analysis can reveal quantitative interdependencies that relate resources, products, people, controls, and outcomes.

Development Stage:

VCAT was created as a specification document and is now operational as a demonstration software tool.

Technology Readiness Level: 7- System prototype demonstration in an operational environment.

Patent Status:

Visual Crosswalk Analysis Tool (VCAT), US Non-Provisional Patent Application No. 12/753,053 (DOE S-118,903), Patent Application Date: April 1, 2010

Licensing Status:

Los Alamos National Laboratory is seeking a commercial partner to create a spinout that will further develop this tool, serve current government customers and work with Los Alamos to expand the capabilities of the software.

For more information, contact Licensing@lanl.gov.

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